Amendments to the Specification:

Please amend the paragraph beginning on page 15, line 5 as follows:

Although not wishing to be bound by theory, the equivalence of the methodology of the present invention with the Black-Scholes method in instances in which the assumptions upon which the Black-Scholes formula are met may be proved mathematically. In this regard, the valuation of a contingent claim determined according to the present invention can be represented as:

$$\cancel{E[\max(s_T e^{-\mu T} - xe^{-rT}),0] = \int_{-xe^{-rT}}^{\infty} (s_T e^{-\mu T} - xe^{-rT}) g(y) dy} \qquad \cancel{(1)}$$

$$\underline{E[\max(s_T e^{-\mu T} - xe^{-rT},0)]} = \underline{\int_{-xe^{-rT}}^{\infty} (s_T e^{-\mu T} - xe^{-rT}) g(y) dy} \qquad (1)$$

wherein s_T is the random value of the underlying asset at time T, μ is first discount rate, T is the time until the contingent claim may be exercised, x is the contingent future investment, r is the second discount rate, y equals $s_T e^{-\mu T}$, and g(y) is the probability density of y. Equation (1) can then be translated into a form more similar to the Black-Scholes formula by the following substitutions:

$$\cancel{E[\max(s_T e^{-\mu T} - xe^{-rT}),0] = \int_{-xe^{-rT}}^{\infty} (s_T e^{-\mu T} - xe^{-rT}) g(y) dy}$$

$$\underline{E[\max(s_T e^{-\mu T} - xe^{-rT},0)]} = \underline{\int_{-xe^{-rT}}^{\infty} (s_T e^{-\mu T} - xe^{-rT}) g(y) dy}$$

$$= E(s_T e^{-\mu T}) N_{d_1} - xe^{-rT} N_{d_2} = S_0 N_{d_1} - xe^{-rT} N_{d_2} \qquad (2)$$

wherein

$$d_1 = \frac{\ln(S_0 / xe^{-rT}) + s^2/2}{s} \qquad (3)$$

$$d_2 = \frac{\ln(S_0 / xe^{-rT}) - s^2/2}{s} \qquad (4)$$

s = std dev of $\ln(s_T e^{-\mu T})$ (5)

and wherein S_0 equals E $(s_T e^{-\mu T})$.

In addition, it is known that:

$$\ln\left(\frac{s_T}{s_0}\right) \sim \phi\left[\left(\mu - \frac{\sigma^2}{2}\right)T, \sigma\sqrt{T}\right] \tag{6}$$

$$\therefore \ln s_T \sim \phi\left[\ln s_0 + \left(\mu - \frac{\sigma^2}{2}\right)T, \sigma\sqrt{T}\right] \tag{7}$$

$$\therefore \ln\left(s_T e^{-\mu T}\right) \sim \phi\left[-\mu T + \ln s_0 + \left(\mu - \frac{\sigma^2}{2}\right)T, \sigma\sqrt{T}\right] \tag{8}$$

wherein ϕ denotes a normal distribution and σ is the volatility parameter utilized in the Black-Scholes method. As such, the definition of s provided by equation (4) is therefore equal to $\sigma\sqrt{T}$. By substituting this definition of s into equations (3) and (4), d_1 and d_2 may be rewritten as follows:

a'

$$d_1 = \frac{\ln\left(\frac{s_0}{x}\right) + \left(r + \frac{\sigma^2}{2}\right)T}{\sigma\sqrt{T}}$$

$$d_2 = \frac{\ln\left(\frac{s_0}{x}\right) - \left(r + \frac{\sigma^2}{2}\right)T}{\sigma\sqrt{T}}$$

As described above equations (2), (3) and (4) collectively represent the Black-Scholes formula, thereby proving mathematically the equivalence of the methodology with the Black-Scholes formula in instances in which the assumptions upon which the Black-Scholes formula are based are met.